Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the specification:

Listing of Claims

1. A ribonucleoside-derivative of the formula

wherein

R₁ is a base of the purine- or pyrimidine- family or a derivative of such a base or any other residue which serves as a nucleobase surrogate,

R₂ is a proton or a substituted derivative of phosphoric acid,

R₃ is a proton or a protection-group for the oxygen atom in 5'-position,

 R_4 , R_5 and R_6 are independently alkyl or aryl or a combination of alkyl and aryl or heteroatom, R_4 , R_5 or R_6 may also be cyclically connected to each other; and

wherein at least one of the R_4 , R_5 or R_6 substituents comprises a tertiary C-atom or a heteroatom vicinal to the Si-atom.

- 2. A ribonucleoside-derivative according to claim 1 wherein the substituent comprising the tertiary C-atom vicinal to the Si-atom comprises from 4 to 24 C-atoms.
- A ribonucleoside-derivative according to claim 1-or-2 wherein the substituent comprising the
 tertiary C-atom vicinal to the Si-atom is an alkyl-substituent selected from the group
 consisting of tert-butyl, tert-pentyl, tert-hexyl, tert-heptyl, tert-octyl, tert-nonyl, tert-decyl, tertundecyl, tert-dodecyl.
- 4. A ribonucleoside-derivative according to claim 1, 2 or 3 wherein the substituent comprising the tertiary C-atom vicinal to the Si-atom is selected from the group of 1,1-dimethyl ethyl, 1,1-dimethyl-propyl, 1,1-dimethyl-butyl, 1,1-dimethyl-pentyl, 1,1-dimethyl-hexyl, 1,1,2-

trimethyl-propyl, 1,1,2-trimethyl-butyl, 1,1,2-trimethyl-pentyl, 1,1,2-trimethyl-hexyl, 1,1,2,2 tetramethyl-propyl, 1,1,2,2-tetramethyl-butyl.

- 5. A ribonucleoside-derivative according to claim 1 wherein the substituent vicinal to the Siatom comprises a substituted heteroatom.
- 6. A ribonucleoside-derivative according to claim 5 wherein the substituent vicinal to the Siatom comprises a substituted bivalent heteroatom.
- 7. A ribonucleoside-derivative according to claim 6 wherein the heteroatom is oxygen.
- 8. A method for the preparation of a ribonucleoside-derivative according to claim 1, comprising reacting a nucleoside with the formula

where R₁ and R₃ are as defined in claim 1, with a silyloxymethylderivative of the formula

$$\begin{array}{c} \mathsf{R_4} \\ \mathsf{\mathsf{YH_2C-O-Si-R_5}} \\ \mathsf{R_6} \end{array}$$

wherein Y is a suitable leaving group

and wherein R_4 , R_5 and R_6 are independently alkyl or aryl or a combination of alkyl and aryl or a heteroatom, R_4 , R_5 or R_6 may also be cyclically connected to each other.

- 9. The method of claim 8 wherein Y is a halogen.
- 10. The method of claim 8 er 9-wherein R_4 , R_5 and R_6 together comprise between 3 and 30 carbon atoms.
- 11. The method of claims 8-or-9 wherein R₄, R₅ or R₆ comprise at least one substituted heteroatom vicinal to Si atom.

- 12. The method of claim 11 wherein the heteroatom is a bivalent atom.
- 13. The method of claim 12 wherein the heteroatom is oxygen.
- 14. The method of claim 11, 12 or 13 wherein the ribonucleoside derivative is further substituted on the oxygen in 3'-position with a group comprising of a derivative of phosphoric acid.
- 15. A method for the preparation of a ribonucleoside-derivative, comprising reacting a ribonucleoside derivative with the formula

upon an electrophilic activation with a compound of formula:

wherein R_1 is defined as in claim 1 and R_7 is a alkyl- or aryl-group, or alkyl-aryl-group, wherein R_2 is a protecting group,

wherein R₃ is a protecting group,

wherein R_4 , R_5 and R_6 are identical or different alkyl or aryl or a combination of alkyl and aryl substituents, which my be further substituted with heteroatoms and which may also cyclically be connected to each other.

- 16. The method of claim 15 wherein R₄, R₅ and R₆ are defined as in claims 1-to 7.
- 17. The method of claim 15-or-16 wherein the ribonucleoside derivative is further substituted on the oxygen in 3'-position with a group comprising of a derivative of phosphoric acid.